

The Wave
by
Scott Mackay

Derek Scarrow, newly arrived from Vietnam, dropped a dime in the pay phone and called Corinne. He watched his daughter, Lisa, stare out the hospital window at the grass in front. The phone at home rang and rang. On the seventh ring, he thought of all the excuses Corinne had made over the years. On the eighth, he remembered all the broken promises. On the ninth he hung up.

He stared at the phone. If only the world were different. But car accidents happened; comas happened; and bad marriages happened. A new year, 1978, and the war raged on, showed no signs of stopping. And Corinne ... if only the world could be different.

He crossed the lobby to Lisa. How do you tell a deaf girl who's been a coma for five months that her mother wants to run away from them? Lisa looked anything but happy; she was bewildered, as if the world were a new and frightening place. She stared out at the street, her eyes wide, her lips pursed, then glanced at Derek.

She signed to her father: Why are the cars so big? she asked.

What was he supposed to make of this question? She might as well ask why the sky was blue or the grass green, why the sun rose in the east and set in the west, why the wave had come into the world, and why it hung in the sky as an ever-present threat. She looked confused. Dr. Pesnyak said there might be some confusion. He put his hand on her shoulder and smiled.

"Your mother's waiting for us," he said. Lisa studied his lips; she was a good lip reader and he rarely bothered with sign language. "Are you ready?"

Why was she so uneasy? She looked out the window again, at the large cars going by, with their monstrous fins and shiny chrome-work, Cadillacs, Lincolns, and Packards, monuments to Detroit's excess. Cars were cars. Why did she find them so odd today? Her shoulders sank.

She signed: Let's go.

They got in his car, a 1972 Studebaker Deluxe.

She signed: New car?

Dr. Pesnyak said there might be some memory loss. He would just have to take this in stride until she got used to things again. "No. Same old car."

As they drove home, he made excuses for Corinne. Why hadn't she answered the phone? She could have been downstairs pressing clothes through the wringer washer. Or maybe out at the store buying milk. Or she might have been listening to the soaps on the radio.

Lisa signed: Dad, this isn't right.

He smiled, concealing his concern. What exactly did she mean by that? Maybe he was misinterpreting her hand signs.

"I don't know what you mean, honey," he said.

She signed again: Everything is different.

Different how? Had the last five months really changed him that much? Could she see the horror of Vietnam in his eyes, and the disillusionment of a faltering marriage in the way he carried himself with a little less self-respect? Five months. Could she sense the anguish of a father waiting for his only daughter to come out of a coma?

“A lot has happened.” He saw himself flying over Hanoi in his B-29, saw the fires raging below. “It hasn’t been easy.” He pictured himself sleeping on the couch in the living room. “Your mother and I have been going through a lot of changes. But don’t worry. Everything’s going to be just fine.”

She signed to him again: Why are you wearing a uniform?

And now his smile disappeared. Because now she made perfect sense. No more tours. A broken promise. But then came her coma. And with things the way they were with Corinne, what was the point? He didn’t feel at home here anymore. He felt more at home in the skies above Hanoi. How could he tell her was going back in two weeks?

#

To Derek’s relief, Corinne waited for them in the living room. He wanted mother and daughter to forget their grudges and to grasp this opportunity for a new beginning. Lisa grinned shyly at her mother.

Mother and daughter embraced, but even as they embraced, Lisa glanced up at her father. She signed: What’s with her hair?

A fashionable bubble cut, there was nothing wrong, so far as Derek could see, with Corinne’s hair.

And where’s my mother? Lisa signed

Was that a joke? Corinne backed away, having seen Lisa’s hand movements, and looked at Derek.

“She’s not going to start this again, is she?” said Corinne.

“Lisa, your mother’s right here.” He gave his daughter a pleading smile. “Please try to be ... can’t we just forget ... I know it hasn’t been easy for you two while I’ve been away, but I think it’s about time –”

Lisa interrupted with frantic hand signals: Dad, are you joking? This is Aunt Corinne? Where’s Mom? Is she here?

Derek stared at his daughter. Aunt Corinne? If the look on Lisa’s face hadn’t been so serious, Derek might have believed that Aunt Corinne was just another of his daughter’s inventions, the first salvo in an effort to renew the ongoing conflict with her mother. As Dr. Barbara Brettell said, sometimes neglect could turn a sixteen-year-old into a monster.

“Lisa, please don’t joke,” said Corinne. “Let’s give each other another chance. I want us to be friends.”

Lisa stared at Corinne. She signed: But you’re not my mother. You’re my aunt. You’re Dad’s sister.

Her hands were a blur of activity. What did Dr. Pesnyak call it? He couldn’t remember the technical name, but it had to do with memory sequencing. Derek recalled Dr. Pesnyak’s words. Humor her. At least through the first period of adjustment. Dr. Pesnyak had given Derek the name of Dr. Barbara Brettell. At least he had somewhere to turn.

#

“Why don’t we go upstairs?” he said. “Your room’s just the way you left it.”

Lisa's easel stood in the corner, and her paints, charcoal, and pastels were stacked neatly on the shelf above. A smile came to her face, and for the first time since leaving the hospital, Derek relaxed, finally believing that with time Lisa would return to normal.

She hurried over to her easel and did a quick charcoal sketch of Dr. Pesnyak, exaggerating his nose, mustache, and eyeglasses. Then she turned to Derek and laughed in that strange haunting way deaf-mutes laugh. Maybe this wouldn't be so bad after all.

#

Dr. Barbara Brettell, a dark-haired woman in her forties, shook Derek's hand, then turned to Lisa.

"I had a long talk with your father," she said, enunciating the words so Lisa could read her lips. "He says you have interesting ideas about how the world has changed since you came out of your coma. Why don't you come into my office and we can talk about them?"

Lisa nodded, accepting Dr. Brettell's invitation.

"Maybe I should come along," said Derek. "To help with the sign language."

"I don't think so," said Dr. Brettell. "She'll respond better if it's just the two of us. If we run into trouble communicating, I have reams of scrap paper she can write on."

Derek sat in the waiting room while they had their session. A light rain beat against the window and two cardinals flitted to the maple in the park across the street. What was he going to do with the girl? Maybe he should call his brother Jim. Maybe a stay out on the farm might help Lisa make the proper adjustment.

An hour later, Dr. Brettell opened the door, and Derek saw by the look on the doctor's face that Lisa's difficulties were far graver than he had originally assumed.

"Captain Scarrow," said Dr. Brettell, "can I see you in my office?" She smiled carefully at Lisa. "Lisa, you wait out here."

He gave a brief hand signal to his daughter: Are you all right?

Lisa smiled, and signed back that she was fine. She sat down in a waiting room chair and stared at the picture on the wall.

Derek followed Dr. Brettell into her office. The doctor sat behind her desk, shifted some papers to one side, then gazed at the paperweight as she collected her thoughts. She put her hands flat on the desk and looked at Derek.

"She's built a delusional world for herself, Captain Scarrow," she said, "one that she's thoroughly systematized, and one with such precise and meticulous detail ... well, I don't know, we might have a hard time dismantling it, at least in the next little while. I don't know whether it's a direct result of her coma ... or whether it has something to do with her home life. Whatever the case, there's been a definite scrambling in the way she perceives the world."

Derek felt his low-level anxiety jump a notch. "What kind of world?" He prepared himself for the worst.

Dr. Brettell glanced through Lisa's handwritten notes. "It goes beyond what she believes about her mother. She's constructed an entirely alternate history for the world. She says the Vietnam War ended in 1975, with the fall of Saigon to the communists, and that the Americans pulled out in 1973. She says she's not even supposed to be born yet, that she wasn't born until 1979, that we shouldn't be mid-way through the seventies but midway through the nineties. She believes that her mother's name is Diane and that you never fought in the Vietnam War but in something called the Gulf War. She says

everything is different, the cars, the clothes people wear, even the movies they see. She's convinced herself of this, and I'm not sure how or if we can reason with her."

Dr. Brettell picked up a pencil, tapped it against the desk a few times, and cast a preoccupied glance out the window, where the rain drizzled against the glass.

"Is her delusion really so organized?" Derek asked. "You believe we can't show her books, pictures, and newspapers to tell her how the world really is?"

"I don't know. She's just come out of a coma. The possibility of brain damage exists. Maybe that's triggering the delusions. There are a variety of different medications we can try. But she said some awfully strange things. She claims Bobby Kennedy was assassinated in Los Angeles in 1968. She says we're backwards, that all our machines are thirty years out of date. She insists we've gone to the moon. Can you believe that? She actually thinks we've put a man on the moon, and she went into great detail about it, naming names, giving dates, describing the lunar surface ... I've never heard anything so exact from any of my patients ever before."

Derek sank deeper into his chair; he'd been prepared for trouble, but nothing like this.

"So what do we do?" he said. "Is there any way we can help her?"

"We can try her on a variety of medications if things don't improve soon. For now, have her listen to Bobby Kennedy on the radio tonight. He's making a speech about the new Cambodian Offensive. And we might also try a new coma survivor's support group run by a man named Albin Mircheff. It's not particularly organized or official, this group, but it seems to be helping some of my patients. In fact, Mr. Mircheff's a former patient of mine, a previous coma sufferer, just like your daughter. He's offered to talk to people who have gone through the same thing, and, well, I've mentioned him to some of my colleagues, and certain of their patients have spoken to him, and they found him helpful. Gives them some perspective, they say. Maybe it'll help Lisa. Maybe not. Either way, it's worth a try. And try not to worry, Captain, Scarrow. We'll get you daughter back. Somehow, we'll get her back."

#

Derek plucked the note from the kitchen counter before Lisa saw it, the scrawled lines he knew would come sooner or later, Corinne's final goodbye. He didn't want Lisa to see the note so he shoved it quickly into his pocket.

Lisa looked at him, her eyes half-hooded and drowsy. Dr. Brettell had given her something to calm her down.

"Why don't you go upstairs and draw for a while," he said. "I think Aunt Corinne's gone home for the day." He felt his throat tightening. "I'll fry some bacon and eggs and open a can of beans. I'm starving. Aren't you?"

She continued to stare at him. She signed: Dad, I'm frightened. I don't know what's happened.

He hated to see her this way, especially because he felt helpless to do anything about it. He took her in his arms. She cried. He was going to have to call Jim. She would definitely have to stay at his brother's farm now that Corinne was gone.

"Honey, I don't know what happened to you in that coma. But you have to trust me. This is the only world we have. This is the only world we've ever had. There's never been anything different, much as you might believe otherwise. Maybe you had dreams. They don't know too much about comas. You were gone for five months. Anything could have happened."

She signed: The wave came. That's what happened.

"Please, honey ... the wave ... I was here. It got close but it never touched ... this is the only world we have, so please try ... why don't you go up and draw? I'll have supper ready soon."

Lisa went upstairs to her room.

He opened the fridge and took out a carton of eggs. He got a can of beans from the cupboard but was so despondent he didn't have the willpower to continue. He put the beans on the counter and the eggs on the table and shuffled into the living room, where he collapsed on the couch. He knew he was no good for making dinner, that if he moved even so much as an inch, he might break into a million pieces. He didn't feel safe here. He felt far safer in the skies above Hanoi. And in this June of 1978, the skies above Hanoi had to be the most dangerous place in the world. Best to order Chinese, but he couldn't remember whether Lisa liked Chinese. When he was in Vietnam, he was in his own coma, and whenever he came back, everything was strange.

He had to talk to someone, needed someone to tell him why this had happened to him, and why, despite all his good intentions, his marriage to Corinne, after nearly twenty years, had finally self-destructed.

He lifted the phone and dialed the operator. He had the operator connect him to Olney, Maryland, where his good friend, Dr. Paul Karby, lived. If anybody could understand this mess, Paul could.

But Paul's phone rang and rang, and Derek's momentary hope faded to despondency. Maybe Paul wasn't the best person to talk to after all. He was a physicist with the DOD's Special Projects Section, a brilliant yet cerebral man who had never been married and who had been often oblivious to the worsening dynamics of Derek's marriage. No. Paul Karby was a man who understood the esoteric fringes of physics but had no experience when it came to marriage and family life. The phone rang and rang. He wasn't going to reach Paul anyway. Paul was in the thick of the war somewhere, working on another classified SPS project.

Derek hung up. He didn't need Paul anyway. All he needed was Lisa. He loved his daughter. Nothing else mattered as long as he had that. As long as he had that, he had his spirit.

He got up and climbed the stairs. He opened Lisa's door and found her sitting at her easel. Pinned to the easel was the most remarkable portrait he had ever seen, of a woman, roughly his own age, with silken hair tied back in a red ribbon. The woman had searching blue eyes and lips curved in a genial smile. Lisa looked over her shoulder. Derek couldn't pull his eyes away from the portrait. Why did he find it so riveting? Why was it unlike anything Lisa had ever done before? And why did he find something so familiar about the woman? Lisa lifted her aerosol can of matte fixative and sprayed the portrait.

"Who is she?" asked Derek, his voice barely above a whisper.

Lisa signed: She's your wife, Dad. Outside, the wind rustled through the chestnut tree. She's Diane.

#

Albin Mircheff, an older man well into his sixties, with oxygen prongs up his nose, wearing a green cardigan with brown leather elbow patches, leaned back in his armchair and looked first at Lisa, then at Derek. So much for a support group. Dr. Brettell was

right. This wasn't organized at all. This was just a guy. Besides Derek and Lisa, Mircheff was the only one there. Still, if it helped ...

Mircheff had listened patiently for nearly an hour while Derek had arduously interpreted Lisa's hand signs. Mircheff's apartment was cramped but comfortable, full of old books and older furniture, and within the limitations of his health, he had made them feel welcome.

"So she thinks Bobby Kennedy was murdered ten years ago in Los Angeles while celebrating his victories in the California and South Dakota primaries," said Mircheff.

"You'd better not talk about her in the third person," Derek gently warned Mircheff. "She reads lips well."

"I know she does," said Mircheff. "I can see she's a bright young woman. And that sketch of Diane. That's exceptional. As for Bobby Kennedy, well, I don't know. He's our president. You can listen to him on the radio practically every night. I hear him asking Congress for yet more money to fight the war and I can't help thinking we lost the gentle Bobby Kennedy we once knew, the man who wanted peace so much he was willing to die for it."

He gave Lisa a pointed look. Derek grew uncomfortable – he felt Mircheff and Lisa communicated in ways he couldn't fully comprehend.

"By this time next year," said Derek, "the war will be over."

Mircheff shrugged. "You should know. You're the soldier."

"Airman," corrected Derek.

"Yes, airman," said Mircheff. "Tell me, captain, did you ever get a good look at the wave while you were up in your B-29?"

Derek thought of the shimmering bands of color, like the Aurora Borealis, only a hundred times brighter, remembered how it interfered with their more sensitive instruments.

"Yes," he said.

"Beautiful, wasn't it? I miss it."

"You can still see it in the southern hemisphere. And no, I didn't like it. It made navigation difficult. Some of our best pilots lost their lives because of that wave."

"Really?" said Mircheff. "I had no idea."

"We had trouble calibrating our instruments."

Mircheff leaned forward and took a sip of his tea. "If the wave could have these small physical manifestations, why couldn't it have larger ones? To be frank, Captain Scarrow, I suffer some of the same ... dislocation your daughter does. I've read a great deal about comas and I've yet to encounter any documentation remotely describing the after-effects me and some of the people I've talked to have experienced. Our symptoms are all new, as far as the medical literature is concerned. A man on the moon. I like that. And satellites. What a great boon that would be to the war in Vietnam."

"I came here for your help, Mr. Mircheff," he said. He looked around the apartment. "Maybe this wasn't such a good idea. I was expecting something more ... professional."

"I want to help your daughter, Captain Scarrow. But what I find most baffling, even terrifying, is that she and I share some of the same memories."

Derek glanced at his daughter. How had this man ever convinced Dr. Brettell that he might actually help coma sufferers? "Lisa, I think we better go."

"No!" She vocalized the word, in the tormented way deaf people speak.

“Please, Captain Scarrow. I’m not crazy.” He put his cup down. “I’ll give you an example. I had a brother, his name was Miro.” He shrugged. “And yet now I’m told I never had this brother, that there’s no record of this man, my brother, Miro Mircheff. He’s the man who cared for me when I got my heart problem, the man I grew up with, first in the back street of Sofia, then here in America. I’ve written the Bulgarian Consulate. They have no record of such a man. I gave them dates, places, names, but they told me my information was wrong. I looked for my brother’s shop in Delaware Street – he was a butcher – but all I find there now is a park and a fountain. Everybody tells me there isn’t a Miro Mircheff, but I know there is. Just as Lisa knows there’s a Diane. How do we explain it? We don’t. We exhaust all possibilities. Then we think of our comas. We think of the wave. And we can’t help wondering. Have we, because of our comas ... have we been left untouched ... have we ... have I really lost my brother? Will I never see Miro again? And will I continually be told that he never existed in the first place?”

The old man stopped. He was winded, red in the face. We exhaust all the possibilities. Was this man crazy? And if he was, did he suffer from Lisa’s same delusional state, convinced that he had been shunted to an alternate world?

“So you don’t like this world?” said Derek. “You’d sooner have the old one back. The world you say existed before the wave came?”

Mircheff’s eyes widened. “So you believe us then.”

“I didn’t say that. I just want to help any way I can. I want to get my daughter back. Tell me more about the world you left behind.” Derek couldn’t help thinking what his old friend, Dr. Paul Karby, of the SPS, had said about the wave, that the normal laws of physics weren’t absolute, and there was room for variation, even surprises. “You tell me what’s so different about this world.”

Mircheff looked out the window and a wistful smile came to his face. “It’s not that I don’t like this world. It’s just that I miss my brother.” He glanced at Lisa, who watched his lips intently. “Just as Lisa misses her mother. In many ways, this is a much simpler world. And a much safer one. Everything is slower here. People aren’t frightened of each other. There’s more innocence to this world. People don’t lock their doors when they leave home. The machines are far less sophisticated. There isn’t an Einstein or a Fermi or an Oppenheimer.” Mircheff’s brow creased. “Forgive me, Captain Scarrow, these are names you’ve never heard of. These are men who don’t exist. You’ve never had nuclear fission, don’t know the first thing about the splitting of atoms, and couldn’t possibly imagine the destructive force of a hydrogen bomb.”

“I’m sorry, Mr. Mircheff, but you’ve lost me. Hydrogen bomb?”

“Ask your daughter,” said Mircheff. “She knows.”

Derek turned to Lisa. Lisa gave him a pensive nod, as if the hydrogen bomb were something she could live without.

#

The next morning, two men from the Special Projects Section came to his door and told him his leave had been canceled, that he would fly to Vietnam in three hours, and that a Catalina seaplane was waiting for him. This gave him the morning to make arrangements with Jim.

“Remember what I told you, honey,” said Derek, stroking his daughter’s hair. “This isn’t the best of worlds, but it’s the only one we’ve got. I know you’ll like it on Jim’s farm.”

Despite her tears, she nodded. Then she opened her drawer and pulled out the portrait of Diane.

She signed: Please take this with you, Dad.

He looked at the portrait, saw some dried tears staining it, Lisa's tears. He knew how much this portrait meant to her. And even though he couldn't understand it, he took the portrait, would cherish it, because it represented all the things that might have been, and, in a better world, what should have been.

#

Not many crossed the Pacific by Catalina seaplane. Most went cramped like sardines in troop carrier convoys. But he was in Special Projects now. His old friend, Dr. Paul Karby, had said a word or two in the right places.

The plane hopscotched across the Pacific, refueling often.

While up in the sky on the second night, he caught a glimpse of the wave far to the south, radiant in its hues of emerald, crimson, and sapphire.

Five hundred miles from Da Nang, the seaplane unexpectedly changed course and turned toward mainland China, to the small island of Wanshan, a tropical paradise the Americans had turned into an air base.

After a short night's rest, Derek, his crew, and the crews of four other strategic bombers gathered in a bunker for mission briefings and new orders. When Dr. Paul Karby got in front of them, Derek knew this wasn't going to be just another regular bombing run. For one thing, all five pilots had picked numbered tickets out of a hat. Derek had picked number 3.

"Gentleman," began Dr. Karby, "you're here to begin rehearsal missions. Many of you have been involved in the carpet bombing of North Vietnamese military-industrial centers, and despite your valiant efforts, we have yet to deliver a crippling blow to Ho Chi Minh's war machine. Every day, the lives of countless marines are lost in the ground war. But we believe that we've achieved a scientific breakthrough. We've developed a weapon of such destructive force that the North Vietnamese will find it impossible to dig their tunnels deep enough and disperse their factories widely enough. This weapon, through its sheer terror, will coerce Hanoi into surrendering unconditionally."

Dr. Karby walked to a large tarp-covered object.

"Each captain has picked a numbered ticket between 1 and 5. On the tarmac you'll find five hangars numbered 1 through 5. And within each of these hangars is a specially-equipped B-29, a state-of-the-art airplane designed specifically to carry this new weapon."

Dr. Karby pulled the tarp away and Derek saw a bomb unlike any he had ever seen, squat, black, and ugly.

"Gentleman, I give you Little Boy," said Dr. Karby. "This bomb doesn't operate on any known explosive principles. While it's something that might fit in the trunk of your car, it has enough destructive power to level an entire city. One such weapon has been test-detonated at the Alamogordo Air Base in New Mexico. The blast was seen from ten miles away and the fierce heat melted the desert sand to glass." Dr. Karby affectionately patted the bomb. "This weapon operates on new principles, the principles of nuclear fission, a technique for splitting atoms. None of you has ever heard of nuclear fission. Only a select group of scientists involved in the project know of nuclear fission ..."

Derek found he couldn't listen anymore; couldn't listen, because he now understood, with shattering clarity, that more than a select group of scientists knew about nuclear fission, that there was a man back home with oxygen prongs up his nose, and also his own daughter, and they both knew about nuclear fission. He understood that there were hundreds, possibly thousands – any and all who had been comatose when the wave struck – who knew about nuclear fission and how it could melt sand into glass.

#

He walked to hangar number 3 after the briefing, his legs moving mechanically as he struggled to come to terms with the implications of his discovery. He looked to the south, beyond the palm trees, where the wave glowed like a giant midnight rainbow. Was there a different life out there? A different world? Had there really been a Diane?

He heard footsteps behind him, and turning, saw Paul approach him over the tarmac. He didn't want to talk with anybody right now. In fact, he was so overwhelmed by his unexpected revelation, he wasn't sure what he should do. Paul kept coming. Best to keep it quiet. At least for now.

He gave Paul a smile.

Paul put his hand on his shoulder. "Is everything all right, Derek? You walked out of there awfully fast."

Derek shrugged. "I'm just tired, Paul."

Paul stared at him the same way he sometimes stared at a complicated mathematical equation. Derek at last felt so uncomfortable he turned away.

"You're sure that's all?" said Paul. "There's nothing I should know about, is there? Because this is an extremely critical mission, Derek, and if there's something I should ... if you don't feel you can –"

"I'm fine, Paul. There's nothing wrong."

Paul looked at the tarmac. "Can I walk with you to the hangar?"

"You don't have to ask."

"I'm sorry, Derek. I haven't been ..." The two men walked toward the hangar. "I've been ..." Derek waited, but Paul didn't finish, seemed lost for a moment. "So," said Paul. "What do you think?"

"About what?"

Paul glanced at the special hangars. "About Little Boy."

"Is this why I haven't seen you since Christmas?" said Derek.

"You wouldn't believe the work that's gone into this thing, Derek. Or the money. This is big. It's so big it's going to change the world. And if it helps end this war ..." He trailed off as his gaze settled on the wave. "I'm sorry I had to call you back early, Derek. How's Lisa? Is she all right?"

Derek shrugged. "She's had some confusion. But I think she'll pull through fine."

"She hasn't said anything, has she?"

Derek stopped, unnerved by Paul's probe. "What do you mean?"

"She's been in a coma, Derek. Sometimes people say strange things when they come out of a coma. She's all right, isn't she? There hasn't been any brain damage, has there?"

"We don't know yet."

"And she didn't say anything that upset you?"

Derek's eyes narrowed. "What are you getting at?"

“Nothing. I just thought you looked ... like I said, you left the briefing awfully fast. I thought there might be ...” He stopped, and a guarded look came to his face. “Never mind. How’s Corinne?”

Derek looked away. “She’s okay.”

The two men walked toward the hangars again.

“Good. I’m glad everything’s all right. Because I hate taking you away from them, Derek. I know how hard it is. But we had no choice. We had to bump the schedule forward.” He looked at the wave. “That thing. Whatever it is. We thought it was moving away from us. And it was. For a while. But now we think it’s coming back. And who knows what it’s going to do. We wanted to go ahead soon before it started interfering with our instruments again.”

#

Enola Gay. Airplane Number 3. What kind of name was that for an airplane.

Derek lay on his bunk trying to collect his thoughts. Out the small mesh window, he saw the wave, glowing, glowing, glowing, like something alive, warping everything around it. Would it actually reach them this time? And had it actually reached them last time? He didn’t know. This was the only world he knew. In this world, there had never been a Diane. If it reached them this time, would it make the world a better place. Or would it still be a place of broken marriages, deaf daughters, and endless war? He shook his head. No. The world would be a better place. He took a snapshot of Lisa out of his wallet. He was a father, and fathers always carried the candle of optimism for their children.

He set the snapshot aside and pulled out the portrait of Diane. And he was again struck by the familiarity of the face. Did I leave you somewhere behind in another world? And will I find you in the next? He looked at the sky. The wave looked bigger tonight. Was Diane out there somewhere, in that swirling color? And would he find her? Yes, he would find her. In a world without war, one without tears, and in a place where his daughter would hear his voice for the first time, he would find the woman in this picture.

He would find Diane.

#

Derek and Paul sat on some oil drums outside hangar number 3. Paul was a good listener, had let him speak for the last half hour without interruption. Paul took off his glasses and held the portrait of Diane at arms-length to get a better look at the woman’s face.

“I have Albin Mircheff’s address and telephone number,” said Derek. “In case you want to have your people talk to him. I don’t think there’s any other way he could have known about nuclear fission. And I know he’s not a spy. My daughter knew about nuclear fission too. You can have your people talk to her too if you like.”

Paul stared at Diane’s face, but Derek saw he was thinking of something else. He handed the portrait to Derek and put his glasses on. He looked around the air base, squinting in the bright sunshine. “Derek,” he said, his voice tentative. “I’ve been a government scientist for a long time. Too long. I’ve been involved in projects I haven’t exactly ... well, let’s just say I sometimes question the ethics. Sometimes I lose touch, and I’m not sure who I should trust. I usually trust other scientists, to the exclusion of all others. We begin to pursue science for its own sake, and we lose sight of our original

purpose. We stop asking ourselves if what we're doing will have any benefit for humankind. We're more interested in our own selfish fascination."

Derek stared at his friend, waiting for more, knowing there had to be a point, but Paul was now strangely silent. The scientist looked across the tarmac to where a ground crew checked one of the specially-equipped B-29s.

"Paul, I'm not sure what you're getting at."

"Have you ever heard of the Planck scale, Derek?"

"No."

"It's a scale used to measure particles billions of times smaller than an atom. When particles become that small, we call them virtual particles, because in essence, they occupy no space at all. That's when you have to redefine exactly what a particle is. Is it mass? Is it time? Space? Is it energy? Or is it all four rolled into one?"

Derek shook his head. "I'm sorry, Paul. You've lost me. And I don't see what this has to do with Albin Mircheff and the wave."

Paul nodded, as if he understood and even expected Derek's difficulty. "Let me put it another way. Remember when I was in Chicago, involved in particle acceleration research?"

Derek blinked. He thought he knew the famous D. Paul Karby's career well, but this was something new, something he had never heard of. "I'm afraid I don't."

"No," said Paul, his tone now pensive. "Of course not. It was a long time ago." He shook his head. "We did good work in Chicago. The accelerator isn't there anymore. I think there's a park there now. Our research pushed the frontiers of knowledge. We were trying to divide particles until we reached something called Planck's limit, a kind of absolute zero for matter. We believed that matter, energy, time, and space were all part of the same field. We wanted to prove this and were willing to go to great lengths. I'm sorry, Derek. I'm confusing you. I'm a little confused myself. I was feeling you out last night. You probably guessed that. The way I was asking you about Lisa. Forget all that. I see I can trust you now. I should have told you sooner. It's not that I didn't want to tell you. It's just that it's so hard for me. To trust anybody but the scientists I work with."

"I'm still not sure what you're getting at, Paul."

Paul took off his glasses and rubbed his eyes. He looked tired, old. "We reached Planck's limit, Derek. In fact, we went beyond it. Another government project. I don't have to call Albin Mircheff, and I don't have to talk to your daughter. I'm sorry. I should have told you last night. I know all about the wave, Derek. The wave is what happens when you go beyond Planck's limit."

Across the tarmac another of the B-29s was towed from its hangar by a Jeep, and a second ground crew ran a check.

"Paul, I can't believe this. You mean you ... was this a —"

"You have every right to be angry, Derek."

"But you should have ... why didn't you come to me sooner, Paul? You could have come to me at any time. I would have been more than willing to help."

"We thought you might find out," said Paul. "Because of Lisa. I'm sorry, Derek, I feel like a fool. I told the others we could trust you but they wanted to wait."

Derek looked away, not sure what to say.

"But what is this wave?" he finally asked. "What does it do? And what about Lisa and Mircheff?"

Paul shook his head and shrugged. "Derek, the wave is like a pendulum." He glanced around the base. He looked exhausted. "We're too cut off from the world in the SPS. We're suffocating in secrecy."

"What do you mean by pendulum?"

Paul's eyes narrowed as he searched for the proper words. "The wave comes and goes, Derek. And you never know what it's going to leave behind. It makes a jigsaw puzzle of time and empties the pieces any which way it pleases. As for your daughter and Mircheff ... well, we don't know. The mind is a funny thing. In a coma, it shuts down. It becomes immune to time and space, which is what the wave is all about. We were all of us victims at first. We had no idea what we had done. We were oblivious, just like you, living on each new shoal with no idea how the wave was changing us." He shrugged. "Who knows how many times it's come and gone? It's funny. I found out the same way you did. A friend of mine was in a coma. I was able to conduct an investigation. We interviewed hundreds of coma victims. And we came to one inescapable conclusion. That we couldn't control our destiny unless we destroyed the wave."

#

Derek slipped off the barrel and took a few distracted steps onto the tarmac, fighting to come to grips with this new information, wondering how many times he had been reinvented, or conversely how many times he might have been like Diane, or Miro Mircheff, a man who didn't exist. Planck's scale. Planck's limit. Who was Planck? He had never heard of the man.

"So what did you do?" he asked.

"There's a drug we take."

"A drug for what?"

"For coma. We take the drug and we ride it out. Each time we come to a new shoal, we try to figure out ways to stop the wave."

His friend slipped his glasses back on, looking guilty and embarrassed, and once again glanced at the portrait of Diane.

"Lisa's good, isn't she?"

"How often have you ridden it out?" asked Derek.

"We have a retreat in Alaska," said Paul. "There's 140 of us. All scientists. We've had to wait eight times for conditions to be remotely tenable. Even though this time the technology isn't optimal, we knew we had to try. What's it take to make a bomb?"

"Eight times?" Derek walked over to the portrait and picked it up. "So you knew Diane?"

"She was here six of those eight times. With each pass, the wave jumbles things more badly. She might be gone for good, Derek. There's no guarantee that once we kill the wave you'll get her back."

"And you think you can kill the wave?"

"With your help we can. That's why you're here, Derek. On Wanshan. Weapon Number 3 isn't like the others. Weapon Number 3 is going to make a tiny distortion in the wave, one that's going to grow and eventually shatter the wave. That's not to say the wave won't play its trick one last time. Who knows what kind of place we'll wake up in?"

"Are you sure it's going to work?"

A worried crease came to Paul's brow.

“We don’t know exactly what’s going to happen,” he said. “But we hope the wave will be gone. Like I said, the technology isn’t optimal. But if we fail, we’ll try again. You’ll be with us from now on, Derek. We’ll see you on the next shoal. One way or the other we’re going to beat that thing.”

#

The Enola Gay flew with a skeleton crew: pilot, co-pilot, navigator, and bombardier. Derek manned the cockpit. He flew southward. As far as his crew was concerned, they were conducting an atmospheric atomic test, a warning to the Vietnamese. Hanoi had been alerted and had dispatched patrol boats to the vicinity to witness the awesome display of power. America didn’t want to flatten Hanoi unless it had to. But Hanoi would see nothing. The weapon they carried would detonate invisibly, burst with a spectrum of light and magnetic waves; a question of changing the frequency, Paul had said, so that the tuning of the sky and the march of time would twist momentarily and shatter the wave into harmless static.

“We’re going up,” he said, and immediately climbed.

The B-29 had a service ceiling of twenty-two-thousand feet, and they were already past twenty-one-five. His co-pilot, Dave, glanced his way, but said nothing. The wave loomed before them, blocking most of the sky. The altimeter reached twenty-two thousand and still they climbed.

Dave leaned forward and looked at the wave. “We’re over the test site now, captain.”

Derek nodded. “We’re going higher. Up to twenty-five thousand, if we can.”

Dave stared at Derek. “Why so high?” he asked. His voice now revealed his apprehension. “We might choke the engines.”

But Derek didn’t reply, kept climbing and climbing, until the sky disappeared and the ocean vanished and they were surrounded by the sparkling colors of the wave. And in the wave he heard countless voices, all those who might have been, but who were now locked in the wave’s fickle web of time. He glanced at his wingtip as the aircraft shuddered, and saw that the flap faded in and out, as if its molecules and atoms had lost cohesion. The instrument panel died. The navigator radioed from his post in the forward cabin.

“Captain,” he said. “I’m not getting anything. From my standpoint, we’re lost.”

Yes, lost. That’s because they were everywhere and nowhere, in a place where time, space, matter, and energy blended indistinguishably in what Paul called a unified field. The plane shook again, this time more violently. A field where the primal pith and substance of the universe incubated in an amorphous potentiality.

Derek spoke to his bombardier through the radio. “Any time you’re ready, Alistair.”

He waited for a reply but none came.

“Alistair, are you there?”

But again there came no answer. The plane shook once more. Derek looked at Dave. “I’m going back. You take over.”

Dave nodded. Derek walked into the forward cabin past his navigator, who frantically tried to get his equipment working again, and hurried to the bomb-bay area.

Alistair sat on the floor cross-legged, immobile, fading in and out like the plane’s left wingtip, bathed in a flickering coat of red and blue particles. Derek pushed Alistair aside, opened the bomb-bay doors, and launched the weapon.

The bomb rolled out of the plane and its high-altitude balloon inflated, carrying it dangling and aloft into the shimmering bands of color. Derek watched it trail away behind the plane until it disappeared from sight. He then closed the bomb-bay doors and hurried to the cockpit.

“Let’s take it into a dive,” he said. He checked his watch. “We’ve got forty-five seconds to get out of here.”

Forty-five seconds. But inside the wave, time meant nothing, and in a few moments, long before they reached even twenty-thousand feet, the bomb detonated and sent the plane into a tailspin.

He fought to gain control of the aircraft, but no matter how hard he tried, he couldn’t pull it out of a steep dive. And the B-29 wasn’t constructed for such torture. His left wing, perhaps weakened by the wave, broke off and shattered into fragments. He had no idea if he had any engine power left because his instrument panel wasn’t registering anything. The cockpit filled with smoke. Even before he could give the order to bail out, the plane broke apart and fell away from him as if made of cardboard.

He found himself falling through a thin blue sky toward the twilit ocean far below. He pulled his parachute ripcord. From a false cap on a back molar he extracted a pill, the coma drug, and bit into it hard, ready to ride another failure out with the scientists if the bomb didn’t work. But before he got the chance to feel whether it was working, something fell on his head, a piece of debris, and unconsciousness closed around him like a big dark hand.

#

He woke a long time later. In a hospital bed.

At first he couldn’t stay awake for more than a few seconds at a time. Sometimes he heard the doctors and nurses talking, and from their snatches of conversation, he learned that he had been in a coma.

When he saw snow falling outside his hospital window, he knew it must be Christmas, and that he had been in a coma for months.

Then one day he woke up and stayed awake. That’s when Lisa and Diane came to visit him.

Everything was blurry at first. He couldn’t focus his thoughts. But he knew Dr. Paul Karby stood in the back of the room, watching Lisa and Diane.

“The wave,” said Derek. He was confused. His voice sounded distant, seemed to echo from wall to wall. “Did we get it?”

Paul came forward, said a few words to Lisa and Diane, ones Derek couldn’t hear, then leaned over Derek’s bed. “We got it, captain.”

Like his own voice, Paul’s sounded far away. Lisa and Diane looked at each other as if they didn’t know what was going on. Derek was so exhausted by asking about the wave, he lost consciousness again and didn’t regain it until supper.

This time, he felt more alert. Lisa and Diane were still there. Paul was gone.

“I don’t remember anything,” he said. Strictly speaking, this wasn’t true. He now had two sets of memories. The old set included Corinne. The new set glowed with the benign and soft presence of Diane. “My head hurts.”

“You were shot down over Baghdad,” said Diane. “Try not to talk. The doctor said you’re to rest.” She lifted his hand and kissed it. “I’m so glad you’re back. Lisa, why don’t you show Dad what you made him for Christmas?”

“Are you sure you’re not too tired, Dad?” said Lisa.

He looked at Lisa, startled by the sound of her voice. “You spoke. You’re not deaf anymore.”

Mother and daughter looked at each other, and he saw the concern in their eyes. He knew then that the world had changed, that he was in for a lot of surprises.

“Honey,” said Diane, “maybe you’re a little confused right now. Why don’t we come back after you’ve had a little rest?”

“No. I’m sorry. Go ahead, Lisa. Show me what you’ve made.”

Lisa pulled a portrait out of her artist’s portfolio, the most remarkable portrait he had ever seen, of a woman, roughly his own age, with silken hair tied back in a red ribbon. A portrait of Diane. The likeness he had taken to Wanshan with him – not creased and dog-eared from his two-day trip in the Catalina seaplane – but fresh, new, and full of promise ...

####